Relativistic Heavy Ion Collider Magnet Division Procedure	Proc. No.:	RHIC-MAG-R-7152		
Magnet Division Procedure	Issue Date:	May 22, 1989		
	Rev. No.:	<u>C</u>		
	Rev. Date:	April 2, 1993		
Class: Dipole/Quadrupole Conductor Title: Splicing Electrical Insulating Film				
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■ ES&H Review:	Signature on	Signature on File		

REVISION RECORD

Rev. No.	Date	Page	Subject	Approval	QA	ES&H
A	11/5/90	3	Revised Fig. 1.			
В	4/21/92	1,2	Revised procedure and			
			Fig. 1.			
С	4/2/93		Revised for clarity,			
			added safety cautions.			
			See SCR #481.			

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1. <u>Purpose</u>:

This procedure prescribes the methods for splicing the electrical insulation film (Kapton or equivalent) on the cable insulating machine while insulating superconducting cable.

2. <u>Applicable Documents</u>:

12010181 Insulation, Polyimide Film

- 3. Requirements:
- 3.1 Material/Equipment:

PVC gloves (BNL Stock No. K-62646)

Kingco 15-106-37 General Purpose Adhesive or approved equivalent

Medical cups (BNL Stock No. I-80567)

Stirring sticks (BNL Stock No. I-82170)

Single-edge safety razor blade or equivalent (BNL Stock No. H-32985)

Kingco adhesive (Vendor Part No. 15-106)

- 3.2 Procedure: (See Fig. 1)
- 3.2.1 Spray adhesive into a mixing cup.

CAUTION: Do not apply adhesive to bare cable.

- 3.2.2 With a mixing stick, apply adhesive to the cable's upper flat surface over the previously wrapped layer of insulation (Fig. 3.2.2).
- 3.2.3 Maintaining the 50% overlap, bring the trailing end of the broken film around cable and press the film into the adhesive with mixing stick (Fig. 3.2.3).

CAUTION: Do not cut into insulation and/or cable.

- 3.2.4 Using a single edge safety razor blade or equivalent, cut insulation along cable edge while applying tension to insulation. Be sure not to damage cable edge while cutting insulation (Fig. 3.2.4).
- 3.2.5 Apply adhesive over the end of the insulation that has just been glued (Fig. 3.2.5).
- 3.2.6 Align the leading end of the insulation from the spool allowing overhang (Fig. 3.2.6). Press the film to the adhesive with mixing stick.

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CAUTION: Do not cut into insulation and/or cable.

- 3.2.7 While applying tension to overhanging insulation, use razor blade to trim overhanging insulation along edge of cable.
- 3.2.8 Manually rotate the wrapper one full turn prior to restart.
- 3.2.9 Resume cable insulating (RHIC-MAG-R-7155).
- 4. Quality Assurance Provisions:
- 4.1 The Quality Assurance Provisions of this procedure require compliance with the procedural sequence described herein.
- 4.2 Record all breaks/splices and repairs as prescribed in RHIC-MAG-R-7155.
- 5. Preparation for Delivery:

N/A

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